WEST Search History

DATE: Tuesday, July 01, 2003

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=AND		
L1	conjugat$.ti.	20743	L1
L2	L1 and (shiga$ or slt or ospecific or o-specific or o157 or o111 or o17 or o26 or o-26 or o-111 or o-17 or lps)	140	L2
L3	L1 and (shiga$ or slt$ or stx$ or vt$ or verotoxin$ or vero-toxin$).clm.	4	L3

END OF SEARCH HISTORY

WEST Search History

DATE: Tuesday, July 01, 2003

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT; PLUR=YES; OP=AND		
L1	shiga$.clm. and (holotoxin or holo-toxin or ab5).clm.	1	L1
L2	L1 and (ospecific or o-specific or o157 or 0157 or o-157 or o-side or 0-side or oside or 0side)	0	L2
L3	shiga$.clm.	41	L3
L4	shiga$.ti,ab.	27	L4
L5	L4 or l3	51	L5
L6	('6392121'| '6413768'| '5955293'| '5747272')[PN]	4	L6
L7	(o157 or 0157 or o-157 or 0-157 or antio157 or anti-o157).clm.	47	L7
L8	(o157 or 0157 or o-157 or 0-157 or antio157 or anti-o157) same (couple or conjugate or conjugated or coupling or linked or linker or joined or joining or attach or attached or attachment or attaching or covalent or covalently)	66	L8
L9	('6472506')[PN]	1	L9

END OF SEARCH HISTORY

08723438 20002614 PMID: 10531288

Syntheses and immunologic properties of Escherichia coli O157 O-specific **polysaccharide and** Shiga **toxin 1 B subunit** conjugates **in mice.**

Konadu E; Donohue-Rolfe A; Calderwood S B; Pozsgay V; Shiloach J; Robbins J B; Szu S C

National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, Maryland 20892-2720, USA.

Infection and immunity (UNITED STATES) Nov 1999, 67 (11) p6191-3, ISSN 0019-9567 Journal Code: 0246127

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Subfile: INDEX MEDICUS

Escherichia coli O157 is the major cause of diarrhea-associated hemolytic uremic syndrome (HUS). Strains causing HUS contain either **Shiga** toxin 1 (**Stx1**) or **Stx2** , or both. In adult volunteers, **conjugate** vaccines of detoxified lipopolysaccharide (LPS) elicited bactericidal antibodies to E. coli O157. Here, the detoxified LPS was **conjugated** with improved schemes to the nontoxic B subunit of **Stx1** . Mice injected with these bivalent **conjugates** elicited both bactericidal antibodies to E. coli O157 and neutralization antibodies to **Stx1** .

Tags: Animal; Female; Human

Descriptors: Bacterial Toxins--immunology--IM; *Bacterial Vaccines --immunology--IM; *Escherichia coli O157--immunology--IM; * **O Antigens** --immunology--IM; Antibodies, Bacterial--blood--BL; Hela Cells; Mice; **Shiga** Toxins; Vaccines, **Conjugate** --immunology--IM

CAS Registry No.: 0 (Antibodies, Bacterial); 0 (Bacterial Toxins); 0 (Bacterial Vaccines); 0 (O Antigens); 0 (Shiga Toxins); 0 (Vaccines, Conjugate)

Record Date Created: 19991116

Record Date Completed: 19991116

DIALOG

WEST

Search Results - Record(s) 1 through 1 of 1 returned.

L9: Entry 1 of 1 File: USPT Oct 29, 2002

US-PAT-NO: 6472506
DOCUMENT-IDENTIFIER: US 6472506 B1

TITLE: Polysaccharide-peptide-conjugates

DATE-ISSUED: October 29, 2002

US-CL-CURRENT: 530/322; 530/395, 530/402, 530/403

INT-CL: [07] A61 K 38/14, A61 K 51/00, C07 K 1/00

Previous Page Next Page

WEST

Search Results - Record(s) 1 through 4 of 4 returned.

L6: Entry 1 of 4 File: USPT Jul 2, 2002

US-PAT-NO: 6413768
DOCUMENT-IDENTIFIER: US 6413768 B1

TITLE: Expression plasmids

DATE-ISSUED: July 2, 2002

US-CL-CURRENT: 435/320.1; 530/300, 530/350, 530/403, 536/24.1

INT-CL: [07] C12 N 15/63

L6: Entry 2 of 4 File: USPT May 21, 2002

US-PAT-NO: 6392121
DOCUMENT-IDENTIFIER: US 6392121 B1

TITLE: Gemini virus vectors for gene expression in plants

DATE-ISSUED: May 21, 2002

US-CL-CURRENT: 800/287; 435/252.3, 435/252.33, 435/320.1, 435/410, 435/411, 435/412, 435/414, 435/415, 435/417, 435/430 , 435/468, 435/469, 435/470, 536/23.1, 536/23.2, 536/23.6, 536/24.1, 800/278, 800/280, 800/293, 800/295, 800/298, 800/312, 800/317.2, 800/317.3, 800/317.4, 800/320.1, 800/320.2, 800/320.3

INT-CL: [07] C12 N 5/04, C12 N 15/82, C12 N 15/87, C12 N 15/90

L6: Entry 3 of 4 File: USPT Sep 21, 1999

US-PAT-NO: 5955293
DOCUMENT-IDENTIFIER: US 5955293 A

TITLE: Assays for shiga toxin and shiga-like toxins

DATE-ISSUED: September 21, 1999

US-CL-CURRENT: 435/7.92; 435/340, 435/7.32, 435/7.94, 435/7.95, 435/70.21, 435/975, 530/388.4

INT-CL: [06] G01 N 33/53, C07 K 16/00

L6: Entry 4 of 4 File: USPT May 5, 1998

US-PAT-NO: 5747272
DOCUMENT-IDENTIFIER: US 5747272 A
**** See image for Certificate of Correction ****

TITLE: Detection of shiga-like toxins of enterohemoragic Escherichia coli

DATE-ISSUED: May 5, 1998

US-CL-CURRENT: 435/7.37; 435/7.32, 435/7.92, 435/7.95, 435/968, 435/975, 530/388.4, 530/389.5

INT-CL: [06] G01 N 33/569, G01 N 33/53

Previous Page Next Page

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File 155:MEDLINE(R)  1966-2003/Ju[illegible]4
       (c) format only 2003 The Dialog Corp.
*File 155: Medline has been reloaded and accession numbers have
changed.  Please see HELP NEWS 155.

      Set  Items  Description
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Cost is in DialUnits
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Set      Items   Description
S1        1213   (SHIGA? OR SLT? OR STX? OR VT? OR VEROTOXIN? OR (VERO (N)T-
             OXIN?)) (100N) (OSPECIFIC? OR (O(N)SPECIFIC?) OR LPS OR POLYS-
             ACCHARIDE? OR SACCHARIDE? OR OLIGOSACCHARIDE? OR TETRASACCHAR-
             IDE? OR O157?)
S2     1197626   COVALENT? OR COUPL? OR ATTACH? OR LINK? OR BOUND? OR BIND?
             OR CONJUGAT?
S3         310   S1 AND S2
S4         183   S3/1998:2003
S5         127   S3 NOT S4
S6         106   S5 AND (O157 OR O111 OR O17 OR O26 OR SHIGELLA?)
?s ops or osp or (o(n)(ps or sp)) or oantigen or (o (n) (antigen? or serotype?)) OSPECIFI
C? OR (O(N)SPECIFIC?) or 0157 or 0111 or o17 or o26
>>>Invalid syntax
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             ACCHARIDE? OR SACCHARIDE? OR OLIGOSACCHARIDE? OR TETRASACCHAR-
             IDE? OR O157?)
S2     1197626   COVALENT? OR COUPL? OR ATTACH? OR LINK? OR BOUND? OR BIND?
             OR CONJUGAT?
S3         310   S1 AND S2
S4         183   S3/1998:2003
S5         127   S3 NOT S4
S6         106   S5 AND (O157 OR O111 OR O17 OR O26 OR SHIGELLA?)
?s ops or osp or (o(n)(ps or sp)) or oantigen or (o (n) (antigen? or serotype?)) or OSPEC
IFIC? OR (O(N)SPECIFIC?) or 0157 or 0111 or o17 or o26
             759  OPS
             202  OSP
          207451  O
           85220  PS
           40288  SP
             101  O(N)(PS OR SP)
               0  OANTIGEN
          207451  O
          528686  ANTIGEN?
           20243  SEROTYPE?
            3665  O(N)(ANTIGEN? OR SEROTYPE?)
               0  OSPECIFIC?
          207451  O
         1214079  SPECIFIC?
             965  O(N)SPECIFIC?
             119  0157
             460  0111
              46  O17
             285  O26
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                  OR 0157 OR 0111 OR O17 OR O26
?ds

Set      Items   Description
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             OXIN?)) (100N) (OSPECIFIC? OR (O(N)SPECIFIC?) OR LPS OR POLYS-
             ACCHARIDE? OR SACCHARIDE? OR OLIGOSACCHARIDE? OR TETRASACCHAR-
             IDE? OR O157?)
S2     1197626   COVALENT? OR COUPL? OR ATTACH? OR LINK? OR BOUND? OR BIND?
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            OR CONJUGAT?
S3         310   S1 AND S2
S4         183   S3/1998:2003
S5         127   S3 NOT S4
S6         106   S5 AND (O157 OR O111 OR O17 OR O26 OR SHIGELLA?)
S7        5980   OPS OR OSP OR (O(N)(PS OR SP)) OR OANTIGEN OR (O (N) (ANTI-
            GEN? OR SEROTYPE?)) OR OSPECIFIC? OR (O(N)SPECIFIC?) OR 0157 -
            OR 0111 OR O17 OR O26
?s l2/ti
      S8     436  L2/TI
?s s8 and s7
             436  S8
            5980  S7
      S9       0  S8 AND S7
?s s2 and s7
         1197626  S2
            5980  S7
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?s shiga? or slt? or stx? or vt? or verotoxin? or (vero (n) toxin?)
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             799  SLT?
             851  STX?
           12507  VT?
             613  VEROTOXIN?
            7930  VERO
           67750  TOXIN?
              85  VERO(N)TOXIN?
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?s s10 and s11
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           15475  S11
     S12      69  S10 AND S11
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Set     Items   Description
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            ACCHARIDE? OR SACCHARIDE? OR OLIGOSACCHARIDE? OR TETRASACCHAR-
            IDE? OR O157?)
S2    1197626   COVALENT? OR COUPL? OR ATTACH? OR LINK? OR BOUND? OR BIND?
            OR CONJUGAT?
S3         310   S1 AND S2
S4         183   S3/1998:2003
S5         127   S3 NOT S4
S6         106   S5 AND (O157 OR O111 OR O17 OR O26 OR SHIGELLA?)
S7        5980   OPS OR OSP OR (O(N)(PS OR SP)) OR OANTIGEN OR (O (N) (ANTI-
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            OR 0111 OR O17 OR O26
S8         436   L2/TI
S9           0   S8 AND S7
S10       1589   S2 AND S7
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S12         69   S10 AND S11
?t s12/9/all
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Search note cont. BD 7/02

L5: Entry 21 of 51 File: USPT Sep 21, 1999

DOCUMENT-IDENTIFIER: US 5955293 A
TITLE: Assays for shiga toxin and shiga-like toxins

Abstract Text (1):
The present invention relates to a substantially pure antigenic peptide or protein related to Shiga toxin, Shiga-like toxin I, Shiga-like toxin II or a variant of Shiga-like toxin II, and to a vaccine formulation containing such a peptide or protein useful in treating a disease associated with the toxin. Also disclosed is a method for treating a disorder associated with the expression of Shiga toxin or a Shiga-like toxin using an effective amounts of the P1 glycoprotein. Antibodies may be generated to Shiga-like toxin II of the present invention that cross-react with Shiga toxin and Shiga-like toxin I. Also disclosed are methods for removing Shiga toxin or a Shiga-like toxin from a sample such as a body fluid using the antibody or the P1 glycoprotein. Also provided are methods and kits for detecting disorders associated with the expression of Shiga toxins and Shiga-like toxins I and II involving the detection of the toxins.

CLAIMS:

1. A method for detecting a toxin selected from the group consisting of shiga toxin and shiga-like toxin II in a sample, the method comprising:

a) contacting the sample with a capture reagent bound to a solid phase support under conditions wherein the capture reagent specifically binds the toxin, the capture reagent being selected from the group consisting of: hydatid cyst material, P1 glycoprotein, and globotriosylceramide (Gb3);

b) contacting the solid phase support to which the toxin has bound with a monoclonal antibody which specifically binds both shiga toxin and Shiga-like toxin II;

c) detecting the presence or the absence of the monoclonal antibody bound to the solid phase support, wherein the presence of the monoclonal antibody indicates the presence of the toxin in the sample.

4. A method for detecting a toxin selected from the group consisting of shiga toxin and shiga-like toxin II in a sample, comprising:

a) contacting the sample with a first monoclonal antibody bound to a solid phase support under conditions wherein the toxin specifically binds the first monoclonal antibody;

b) contacting the solid phase support to which the toxin has bound with a second monoclonal antibody which specifically binds both shiga toxin and shiga-like toxin II;

c) detecting the presence or the absence of the second monoclonal antibody bound to the solid phase support, wherein the presence of the second monoclonal antibody indicates the presence of the toxin.

5. The method of claim 4, wherein the second monoclonal antibody binds the B subunit of both shiga toxin and shiga-like toxin II.

6. A kit for detecting a toxin selected from the group consisting of shiga toxin and shiga-like toxin II, the kit being compartmentalized to receive in close confinement therein one or more containers, said kit comprising:

a) a first container means containing a capture reagent which binds to shiga toxin or shiga-like toxin II, the capture reagent being selected from the group consisting of hydatid cyst material, P1 glycoprotein, and globotriosylceramide (Gb3); and

b) a second container means containing a monoclonal antibody which specifically binds both shiga toxin and shiga-like toxin II.

13. A monoclonal antibody which specifically binds both shiga toxin and shiga-like toxin II.

19. A method for detecting a toxin selected from the group consisting of shiga toxin and shiga-like toxin II in a sample, the method comprising:

a) contacting the sample with a capture reagent bound to a solid phase support under conditions wherein the capture reagent specifically binds the toxin;

b) contacting the solid phase support to which the toxin has bound with a monoclonal antibody which specifically binds both shiga toxin and Shiga-like toxin II;

c) detecting the presence or the absence of the monoclonal antibody bound to the solid phase support, wherein the presence of the monoclonal antibody indicates the presence of the toxin in the sample.

20. A kit for detecting a toxin selected from the group consisting of shiga toxin and shiga-like toxin II, the kit being compartmentalized to receive in close confinement therein one or more containers, said kit comprising:

a) a first container means containing a capture reagent which binds to shiga toxin or shiga-like toxin II; and

b) a second container means containing a second monoclonal antibody which specifically binds both shiga toxin and shiga-like toxin II.

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End of Result Set

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L5: Entry 51 of 51 File: USPT Apr 20, 1993

DOCUMENT-IDENTIFIER: US 5204097 A
TITLE: Shiga toxin B chain polypeptides and vaccine thereto

Abstract Text (1):
The invention relates to a number of synthetic polypeptides which correspond to a part of the sequences of the Shiga B peptide chain. More specifically, the invention relates to polypeptides corresponding to the residues 5 to 18, 7 to 26, 13 to 26, and 19 to 29 of said B chain. The invention further relates to the conjugates of each of these with a suitable carrier and to polymers of each or these obtained by polymerization with a suitable polymerization agent: these can be used as effective vaccines which afford protection against Shiga toxin. Anti-peptide anti-sera are effective in neutralizing to a large extent the biological activity of Shiga toxin.

CLAIMS:

1. A peptide corresponding to a sequence of residues of the Shiga toxin B chain, the sequence consisting essentially of residues 5 to 18, 7 to 26, 13 to 26 or 19 to 29 of the Shiga toxin B chain, conjugated to suitable carrier.

2. A vaccine against the neurotoxin activity of Shiga toxin comprising, as active ingredient, in an amount effective to provide significant protection against the neurotoxin activity of Shiga toxin as a result of vaccination with said vaccine, a conjugated peptide as defined in claim 1.

6. A peptide corresponding to a sequence of residues of the Shiga toxin B chain, the sequence consisting essentially of residues 5-18, 7-26, 13-26 or 19-29 of the Shiga toxin B chain in polymeric form obtained by polymerization or interpolymerization of said residues with a suitable polymerization agent.

7. A vaccine against the neurotoxin activity of Shiga toxin comprising, as active ingredient, in an amount effective to provide significant protection against the neurotoxin activity of Shiga toxin as a result of vaccination with said vaccine, a polymeric peptide in accordance with claim 6.

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L7: Entry 8 of 47 File: USPT Jun 25, 2002

DOCUMENT-IDENTIFIER: US 6410024 B1
TITLE: Epitopes of shigella like toxin and their use as vaccine and in diagnosis

CLAIMS:

3. The isolated peptide according to claim 2, the Shigella-like toxin being that from an E. coli O157 selected from the group of O157:H7, O157:H- and O26:H11.

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L7: Entry 19 of 47 File: USPT Dec 19, 2000

DOCUMENT-IDENTIFIER: US 6162441 A
TITLE: Method for the production of anti-escherichia. coli O157 : H7 antibody

CLAIMS:

1. A method for producing anti-E. coli O157:H7 antibodies, comprising the steps of:

preparing an antigenic material from E. coli O157:H7 by culturing E. coli O157:H7 in a brain heart infusion broth, killing the bacteria in the material by treating it with 90-100.degree. C. water for 5-10 min, homogenizing the bacteria with the aid of a sonicator, washing the bacterial homogenate with phosphate buffered saline (PBS), and freeze-drying the homogenate;

inducing anti-E. coli O157:H7 antibodies by initially injecting a mixture comprising a solution of 1-5 mg of the freeze-dried bacterial homogenate in 0.5 ml of PBS buffer, pH 7.2, and 0.5 ml of Freund's complete adjuvant into four sites on the chest of an egg-laying hen and subsequently injecting a solution of the homogenate in 0.5 ml of PBS buffer, pH 7.2, along with 0.5 ml of Freund's complete adjuvant, into the chicken at two weeks after the primary injection, to boost the immunity of the hen; selecting eggs laid by the hen containing a sufficient number of The anti-E. coli O157:H7 antibodies, said eggs being laid at 40-60 days after the primary injection;

separating the yolk of an antibody-containing egg from the white and diluting it with distilled water to form a liquid phase containing the antibodies from the selected eggs;

adjusting the liquid phase to pH 5, storing the liquid phase at 4.degree. C. for 6-12 hours, centrifuging the liquid phase at 7,000 rpm for 20 min, filtering the supernatant, and drying the filtrate by freezing or with hot air to give an antibody concentrate, said antibodies being composed mainly of immunoglobulin Y (IgY).

WEST

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L7: Entry 36 of 47 File: USPT Mar 24, 1998

US-PAT-NO: 5730989
DOCUMENT-IDENTIFIER: US 5730989 A

TITLE: Oral vaccine against gram negative bacterial infection

DATE-ISSUED: March 24, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wright; D. Craig	Gaithersburg	MD		

US-CL-CURRENT: 424/241.1; 424/197.11, 424/249.1, 424/255.1, 424/258.1, 424/261.1, 424/450

CLAIMS:

What is claimed is:

1. An oral vaccine preparation for generating anti-LPS antibodies for treating gram negative infection, said oral vaccine preparation comprising inactivated gram negative bacteria and a lipid vesicle encapsulated flavor masking agent, said lipid vesicle comprising a paucilamellar lipid vesicle having 2-8 lipid bilayers surrounding an amorphous central cavity, and said paucilamellar lipid vesicle comprising a non-phospholipid material as a primary lipid in the bilayers.

2. The oral vaccine of claim 1 wherein said flavor masking agent comprises a fragrance encapsulated in said amorphous cavity of said lipid vesicle.

3. The oral vaccine of claim 2 wherein said fragrance comprises a water-immiscible material substantially filling said amorphous central cavity.

4. The oral vaccine of claim 3 wherein said fragrance comprises a flavored oil.

5. The oral vaccine of claim 1 wherein said gram negative bacteria are Enterobacteriaceae.

6. The oral vaccine of claim 5 wherein said gram negative bacteria is selected from the group consisting of Escherichia, Shigella, and Salmonella.

7. The oral vaccine of claim 6 wherein said gram negative bacteria comprises enterohemorrhagic E. coli bacteria.

8. The oral vaccine of claim 6 wherein said E. coli bacteria are selected from the group consisting of 0157:H7, 026 and 0111 bacteria.

9. The oral vaccine of claim 6 wherein said gram negative bacteria comprises Shigella flexneri 2a bacteria.

10. The oral vaccine of claim 6 wherein said gram negative bacteria comprises Salmonella enteriditis bacteria.

11. The oral vaccine of claim 1 wherein said gram negative bacteria are selected from the group consisting of formalin inactivated and heat inactivated cells.

12. The oral vaccine of claim 1 wherein said gram negative bacteria are lyophilized and reconstituted with a reconstituting solution before use.

13. The oral vaccine of claim 1 wherein said lipid vesicle encapsulated flavor masking agent comprises a reconstituting solution.

14. A method of providing treatment against gram negative bacterial infection comprising oral administration of an effective amount of an oral vaccine including as active components inactivated gram negative bacteria and a lipid vesicle encapsulated flavor masking agent, where said paucilamellar lipid vesicle comprises a paucilamellar lipid vesicle having 2-8 lipid bilayers surrounding an amorphous central cavity, and said paucilmellar lipid vesicles comprising non-phospholipid materials as a primary lipid in the bilayers.

15. The method of claim 14 wherein said flavor masking agent comprises a flavoring encapsulated in said amorphous cavity of said lipid vesicle.

16. The method of claim 15 wherein said flavoring comprises a water-immiscible material substantially filling said amorphous central cavity.

17. The method of claim 16 wherein said flavoring comprises a flavored oil.

18. The method of claim 14 wherein said gram negative bacteria are Enterobacteriaceae.

19. The method of claim 18 wherein said gram negative bacteria is selected from the group consisting of Escherichia, Shigella, and Salmonella.

20. The method of claim 19 wherein said gram negative bacteria comprises E. coli.

21. The method of claim 20 wherein said E. coli are selected from the group consisting of 0157:H7, 026 and 0111.

22. The method of claim 19 wherein said gram negative bacteria comprises Shigella flexneri 2a.

23. The method of claim 19 wherein said gram negative bacteria comprises Salmonella enteriditis.

24. The method of claim 14 wherein said gram negative bacteria are formalin inactivated.

25. The method of claim 14 wherein said gram negative bacteria are lyophilized and reconstituted with a reconstituting solution before use.

26. The method of claim 25 wherein said reconstituting solution comprises said lipid vesicle encapsulated flavor masking agent.

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L7: Entry 47 of 47 File: USPT Sep 23, 1975

US-PAT-NO: 3907987
DOCUMENT-IDENTIFIER: US 3907987 A

TITLE: Enteric disease vaccine

DATE-ISSUED: September 23, 1975

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wilson; Michael R.	Guelph			CA

US-CL-CURRENT: 424/257.1; 424/823, 424/825

CLAIMS:

I claim:

1. A bacterial vaccine for the prevention or treatment of E. coli infections comprising a live strain or strains of E. coli incubated in and modified by dilute solutions of about 0.02 to about 0.08% v/v formalin, to give an altered growth pattern and appearance, and reduced viable cell count.

2. The vaccine of claim 1 wherein the E. coli is selected from the strains EWl of 0157;KV17;P307 of 08;K87.88a,c and Al of 0149; K91, K88a,c:H10.

3. The vaccine of claim 1 wherein the viable cell count has been reduced approximately 2 to 7 log dilutions by the formalin.

4. The vaccine of claim 1 in lyophilized form.

5. The vaccine of claim 4 in dosage unit form of about 40 to 400 mg.

6. The vaccine of claim 1 containing broth medium constituents.

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L8: Entry 16 of 66 File: USPT Jun 25, 2002

DOCUMENT-IDENTIFIER: US 6410024 B1
TITLE: Epitopes of shigella like toxin and their use as vaccine and in diagnosis

Detailed Description Text (32):
Antibody was produced against peptides derived from the toxin of E. coli O157. This confirmed the results of the epitope map and that these areas within the molecule are targets for antibody therapy. Peptide 4 and peptide 5 contained the same epitope (SEQ ID NO: 5) but in peptide 4 this was linked to the corresponding sequence from E. coli O157 whilst in peptide 5 this was the equivalent from the holotoxin of Shigella dysenteriae (Fraser et al., Nature Structural Biology, 1(1): 59-64). The reduction in immunogenicity with the sequence derived from S. dysenteriae underlines the specificity of the reaction against the E. coli O157 derived epitope.

WEST

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L8: Entry 37 of 66 File: USPT Oct 26, 1999

DOCUMENT-IDENTIFIER: US 5972721 A
TITLE: Immunomagnetic assay system for clinical diagnosis and other purposes

Detailed Description Text (12):
Various concentrations of killed E. coli O157:H7 were suspended in phosphate buffered saline (PBS, pH 7.4). A 20 .mu.L volume of each suspension was assayed by an indirect sandwich technique. In these assays, 100 ng of the biotinylated KPL goat-anti-E. coil O157 antibody were added to 20 .mu.g of streptavidin coated DYNAL magnetic beads for 10 min., followed by addition of 200 ng of Biodesign rabbit anti-E. coli or chicken anti-E. coli O157 antibody for 30 min. Finally, 200 ng of either appropriate type of Texas Red-conjugated reporter antibody was added for 10 min. Magnetic beads were collected using a cobalt magnet and washed in PBS, followed by resuspension in 1 ml PBS and processing by a prototype immunomagnetic assay system built according to the teachings of the present invention. All incubations were performed with gentle agitation or vortex mixing at room temperature.

WEST

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L8: Entry 55 of 66 File: USPT Aug 19, 1997

DOCUMENT-IDENTIFIER: US 5658751 A
**** See image for Certificate of Correction ****
TITLE: Substituted unsymmetrical cyanine dyes with selected permeability

Detailed Description Text (245):
One gram samples of ground beef are agitated with 9 mL of sterile water at medium speed in a vortexer for 1 minute. Three 0.1 mL aliquots are removed and spread uniformly over the surface of three 100 mm eosin-methylene blue plates, which are subsequently incubated for 24-48 hours at 37.degree. C. An 800 .mu.L aliquot is removed and 200 .mu.L of 5% bovine serum albumin in sterile distilled water are added. 1 .mu.L of a 5 mM DMSO solution of Dye 345 and 100 .mu.L of a 1 mg/mL solution of rabbit anti-0157:H7 IgG are added to the sample, which is then incubated for 15 minutes at room temperature with slow mixing. The sample is then washed by centrifugation at 10,000.times.g for 20 sec in a 1.5 mL tube, and resuspended in 1 mL of sterile water with 4% glutaraldehyde. After 15 minutes incubation at room temperature, the bacteria are pelleted by centrifugation as above and resuspended in 1 mL of sterile water. 2 .mu.L of a 1 mM DAPI solution in DMSO, 1 .mu.L of 5 mM Dye 345, and 20 .mu.L 1 mg/mL TEXAS RED fluorophore-conjugated goat anti-rabbi IgG are subsequently added and the sample is incubated for 15 min at room temperature with slow mixing. Live bacteria are blue fluorescent and dead bacteria are green fluorescent. Only enteropathogenic E. coli are red fluorescent.

WEST

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L7: Entry 44 of 47 File: USPT Dec 1, 1992

DOCUMENT-IDENTIFIER: US 5168063 A
TITLE: Monoclonal antibody to enterohemorrhagic Escherichia coli 0157:H7 and 026:H11

CLAIMS:

2. The monoclonal antibody of claim 1 further characterized as binding to the strains of E. coli 0157:H7 and E. coli 026:H11 listed in Table 1 of the specification.

3. The monoclonal antibody of claim 1, which is specific to E. coli 0157:H7 and E. coli 026:H11, said monoclonal antibody being characterized in that it reacts with a protein having a molecular weight of approximately 13,000 daltons and being located in the other membrane of the cell wall of E. coli 0157:H7 or E. coli 026:H11.

7. A continuous cell line which produces monoclonal antibodies prepared from hybridoma ATCC HB 10452 and specific to E. coli 0157:H7 and E. coli 026:H11, comprising:

(a) a fusing cell which specifically produces antibodies against E. coli 0157:H7 and E. coli 026:H11; and

(b) a myeloma cell.

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L7: Entry 42 of 47 File: USPT Oct 11, 1994

DOCUMENT-IDENTIFIER: US 5354661 A
TITLE: Monoclonal antibody to enterohemorrhagic Escherichia coli 0157:H7 and 026:H11 and method for detection

CLAIMS:

1. A diagnostic kit for detecting the presence of E. coli 0157:H7, E. coli 026:H11, or both, comprising a monoclonal antibody which specifically binds to E. coli 0157:H7 and E. coli 026:H11 prepared from hybridoma ATCC HB 10452 in one or more container and directions for its use.

5. A diagnostic kit for differentiating enterohemorrhagic E. coli 0157:H7 and E. coli 026:H11 from other E. coli and enteric pathagens based upon an outer membrane protein unique to enterohemorrhagic E. coli 0157:H7 and E. coli 026:H11 comprising a monoclonal antibody which specifically binds to the same epitope bound by monoclonal antibody 4E8C12 and directions for its use.

7. An immunoassay method for the detection of E. coli 0157:H7 or E. coli 026:H11, which comprises

(a) contacting a sample suspected of containing E. coli 0157:H7 or E. coli 026:H11 with a monoclonal antibody which specifically binds to the same epitope bound by monoclonal antibody 4E8C12 in order to form an immune complex, and

(b) determining the presence of the complex in order to detect E. coli 0157:H7 or E. coli 026:H11 in the sample.

10. A bioreagent for antibody assays comprising a substantially pure protein found in the outer membrane of E. coli 0157:H7 or E. coli 026:H11 having a molecular weight between about 5000 and 6,000 daltons, said protein being specifically bound by a monoclonal antibody which specifically binds to the same epitope specifically bound by monoclonal antibody 4E8C2.

11. A substantially pure outer membrane protein harvestable from E. coli 0157:H7 or E. coli 026:H11, the outer membrane protein having a molecular weight between about 5,000 and 6,000 daltons, and which specifically binds to monoclonal antibodies secreted by hybridoma ATCC HB 10452.

12. A method for detecting the presence of an antigen wherein the antigen is an outer membrane protein of E. coli 0157:H7 on a sample comprising

(a) culturing the sample in a selective enrichment medium containing acriflavin to form an enriched culture, and

(b) detecting the E. coli 0157:H7 outer membrane antigen in the enriched culture.

17. The method of claim 16 wherein the enrichment medium contains quantity of acriflavin-HCl and casamino acids to enhance antigen expression by E. coli 0157:H7.

19. The method of claim 12 wherein the selective enrichment medium further includes the following components in quantities sufficient to form an enriched culture of E. coli 0157:H7: Trypticase soy broth, bile salts, K.sub.2 HPO.sub.4, casamino acids and novobiocin.

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L7: Entry 46 of 47 File: USPT Feb 27, 1979

DOCUMENT-IDENTIFIER: US 4141970 A
TITLE: Method for enhancing the resistance of new born mammalian young to gastro-intestinal infections

CLAIMS:

6. A method according to claim 1 wherein said mammal is a sow and wherein the enteropathogens against which protection is obtained are one or more of the E. coli serotypes which contain the endotoxins 08, 045, 0138, 0139, 0141, 0149 or 0157, or Clostridium welchii or Vibrio coli.